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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------|------------------|
| 09/806,613 | 03/29/2001 | Ian Anthony Jones | Q90170 | 3061 |
| 23373 | 7590 | 09/21/2006 | | |
| SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 | | | | |
| | | | EXAMINER | |
| | | | ELVE, MARIA ALEXANDRA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1725 | |

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/806,613

Applicant(s)

JONES ET AL.

Examiner

M. Alexandra Elve

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-8, 10, 13-21, 26, 27, 29, 30 and 62-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-8, 10, 13-21, 26, 27, 29, 30 and 62-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 2-8, 10, 13-21, 26-27, 29-30 & 62-74 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 & 11-29 of copending Application No. 10/666,264. Although the conflicting claims are not identical, they are not patentably distinct from each other because the coloration of the workpieces is an obvious variation of plastic workpieces. Furthermore, it is well known that the types of materials chosen are a choice in design and substitutions of known equivalent structures may be made. *In re Kuhle* 188 USPQ (CCPA 1975) and *In re Ruff* 118 USPQ 343 (CCPA 1958). It would have been obvious to substitute a colored workpiece for a plastic workpiece, or an organic dye for a dye (ink) and so forth.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-8, 10, 13-21, 26-27, 29, 62 & 68-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corrsin (USPN 3,477,194) in view of Andrus et al. (USPN 5,093,147).

Corrsin discloses the sealing of thermoplastic thin materials using infrared radiation and a carbon material in between the materials. The carbon substance is printed onto a board, which is faced or overlaid with a thermoplastic material. The coating and film are welded throughout the area overlying the infrared absorbing material. Absorbers may also be in form of inks (functional equivalent of a dye). Lamps or carbon dioxide lasers can be used. An absorber can be a visually transparent radiation absorber that is selective to radiation in a certain range of wavelengths. Specifically two transparent films or substantially transparent films are sealed together by employing a substantially visually transparent radiation absorber which selectively absorbs radiation in a wavelength range to which the films are transparent, thus causing a concentration in heat in areas where such absorber has been applied and thereby effecting sealing. (abstract, figures, col. 1, lines 20-50, col. 2, lines 24-57, col. 3, lines 30-71, col. 4, line 5)

Corrsin discloses an ink (dye) but not an organic type of dye.

Andrus et al. discloses an organic dye (ink), which is highly absorptive of radiation in the near infrared range of 750 to 900 nm. (abstract, col. 2, lines 62-68)

It would have been obvious to one of ordinary skill in the art at the time of the invention to use an organic dye (ink) as taught by Andrus et al. in the Corrsin system because it is merely a variant of ink (dye) types.

Claims 2-8, 10, 13-21, 27, 29, 62 & 67-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muellich (USPN 5,893,959) in view of Andrus et al.

Muellich discloses the welding of thermoplastic materials using a laser beam. The transmission coefficient is used in the formation of a bond. Workpieces may be opaque, colored with dye or transparent. After welding, the individual workpiece parts are substantially no longer distinguishable by the human eye. The proportions of the workpiece parts are joined in the visible region and dye pigment may be used for joining. Wavelengths of 1.06 um may be used. (abstract, figures, col. 3, lines 5-10, col. 7, lines 40-65, col. 8, lines 34-67).

Muellich discloses a dye but not an organic type of dye.

Andrus et al. discloses an organic dye (ink), which is highly absorptive of radiation in the near infrared range of 750 to 900 nm. (abstract, col. 2, lines 62-68)

It would have been obvious to one of ordinary skill in the art at the time of the invention to use an organic dye (ink) as taught by Andrus et al. in the Muellich system because it is merely a variant of ink (dye) types.

Claims 63-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corrsin and Andrus et al., as stated in the above paragraph and further in view of Osborne (USPN 4,069,080).

Corrsin does not specifically teach the use of fabrics/textiles, polyester, fluoropolymer and so forth.

Osborne discloses bonding superposed sheets of polymeric material. A CO₂ gas laser is used for welding the plastic materials, as the energy in the beam generated by the laser has wavelengths that are readily absorbed in the thermoplastic materials such as copolymers of vinyl chloride and vinylidene chloride and so forth. It would have been obvious to one of ordinary skill in the art at the time of the invention to sheet material, thermoplastics and so forth because this is merely a design substitution.

The types of materials chosen are a choice in design and substitutions of known equivalent structures may be made. In re Kuhle 188 (CCPA 1975) and In re Ruff 118 USPQ 343 (CCPA 1958). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a fluoropolymer because it is a polymeric substitute.

Claims 26, 30 & 63-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muellich and Andrus et al., as stated in the above paragraph and further in view of Osborne.

Muellich does not specifically teach the use of fabrics/textiles, thin films, polyester, fluoropolymer or thermoplastics.

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Osborne discloses bonding superposed sheets of polymeric material. A CO₂ gas laser is used for welding the plastic materials, as the energy in the beam generated by the laser has wavelengths that are readily absorbed in the thermoplastic materials such as copolymers of vinyl chloride and vinylidene chloride and so forth. It would have been obvious to one of ordinary skill in the art at the time of the invention to sheet material, thermoplastics and so forth because this is merely a design substitution.

The types of materials chosen are a choice in design and substitutions of known equivalent structures may be made. In re Kuhle 188 (CCPA 1975) and In re Ruff 118 USPQ 343 (CCPA 1958). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a fluoropolymer because it is a polymeric substitute.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Alexandra Elve whose telephone number is 571-272-1173. The examiner can normally be reached on 6:30-3:00 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 18, 2006.


M. Alexandra Elve
Primary Examiner 1725